

Patent Claims

1. Acoustically effective nonwoven (1) for linings of motor vehicles, comprising a porous fibrous skeleton (2) made of coarse fibers (8), in particular comprising staple fibers or spunbonded fibers, and which fibrous skeleton (2) has a continuously changing weight quota of melted on microfibrous material (7) in a front and/or rear surface region (4, 10), said melted-on microfibrous material (7) clinging to the coarse fibers (8) and bonding these in such a manner that the nonwoven (1) has a predetermined air flow resistance and is stiffened at least in its surface region (4, 10) by a predetermined bending stiffness in such a manner that this nonwoven becomes self-supporting.
2. Nonwoven according to claim 1, wherein the coarse fibers (8) have a titre of more than 1 dtex, in particular in the range of 1 to 35 dtex, and preferably a titre of 6 to 17 dtex.
3. Nonwoven according to claims 1 or 2, wherein the coarse fibers (8) are spunbonded fibers and in particular are made of a polyester, a polypropylene or a polyamide, and preferably are made of PET.
4. Nonwoven according to one of claims 1 to 3, wherein said nonwoven (1) comprises non-melted on microfibers (9).
5. Nonwoven according to claim 4, wherein the non-melted on microfibers (9) have a titre in the range of 0.01 to 1.0 dtex, preferably a titre of 0.1 to 0.6 dtex and typically a titre of around 0.2 dtex.
6. Nonwoven according to one of claims 1 to 5, wherein the microfibrous material (7) is a meltblown fibrous material, in particular is made of a polyester, a co-polyester, a polyamide, a co-polyamide, a polypropylene, a co-polypropylene or similar, and preferably is made of PET or Co-PET.
7. Nonwoven according to one of claims 1 to 6, wherein the coarse fibers (8) have a higher melting point than the microfibrous material (7).
8. Nonwoven according to one of claims 1 to 7, wherein the air flow resistance in the surface region (4) of the fibrous nonwoven (1) has a value of between 200 to 60'000

Nsm^{-3} , in particular between 800 to 35'000 Nsm^{-3} , preferably between 1'000 to 20'000 Nsm^{-3} and mainly about 1'400 Nsm^{-3} .

9. Nonwoven according to one of claims 1 to 8, wherein the bending stiffness (B) of the fibrous nonwoven (1) has a value of between 0.005 and 10 Nm and in particular has a value of between 0.025 to 6.0 Nm.
10. Nonwoven according to one of claims 1 to 9, wherein said nonwoven is combined with at least one further nonwoven.
11. Nonwoven according to one of claims 1 to 10, wherein said nonwoven is provided with an air impermeable layer.
12. Nonwoven according to one of claims 1 to 11, wherein said nonwoven is provided with a decorative layer.